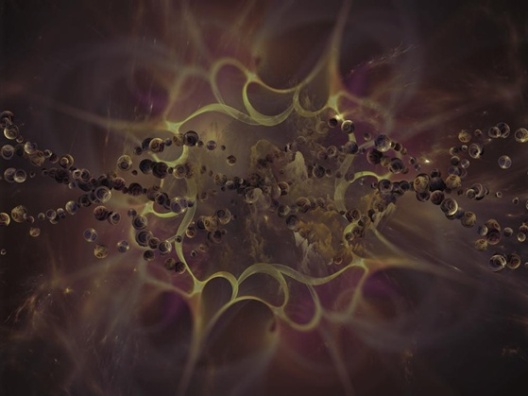
16 Steps to Generating Advanced Life

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By Dr. Hugh Ross

Sixteen steps punctuate the history of life on Earth. Each of these steps is critical for making possible the entry of advanced life. The likelihood of all these steps occurring from a naturalistic perspective is essentially zero. This zero probability does not take into account either life’s origin or the origin of the mind and the human spirit.

Why does the history of life appear the way it does? Naturalists, materialists, deists, and most theistic evolutionists would answer that the chemicals on early Earth spontaneously self-assembled into a simple cell that was able to reproduce. From there, the cell's daughters evolved to produce all the life-forms that have ever existed throughout the past 3.8 billion years. Such a history requires that life make at least 16 transitional steps in order to generate advanced life-forms.

1. Cells containing only a few hundred gene products must transition to cells containing several thousand gene products.
2. Respiration systems must transition from anaerobic to aerobic.
3. Cells must develop nuclei.
4. Cells must develop mitochondria.
5. Cells must transition from free-floating to colony life.
6. Single-celled organisms must transition into multicellular organisms.
7. Asexual organisms must transition into sexual organisms.
8. Organisms must develop eyes or eye precursors.
9. Organisms must evolve differentiated organs and appendages.
10. Organisms with ectoskeletons must evolve into organisms with endoskeletons.
11. Very-small-bodied organisms must become large-bodied organisms
12. Non-animal life must transition into animal life
13. Non-vascular plants must transition into vascular plants
14. Non-chordate animals must evolve into chordate animals
15. Animals must develop a mind, free will, and emotions.
16. Advanced animals must develop a spirit, symbolic cognition, and symbolic relational capability—in other words, they must become human.

**Miniscule Probabilities**

That's quite a list for undirected natural processes to complete. Evolutionary biologist Francisco Ayala notes that, from a Darwinian perspective, each step is highly improbable. Taking into account just a few of these steps, Ayala determined that the probability of intelligent life arising from bacteria to be less than one chance in 101,000,000.1

Physicists John Barrow, Brandon Carter, and Frank Tipler calculated the probability of all 16 steps occurring to be less than one chance in 1024,000,000.2 To get a feel for how miniscule this probability is, it is roughly equivalent to someone winning the California lottery 3,000,000 consecutive times where that individual purchases just one lottery ticket each time. Realistically, this probability is indistinguishable from someone winning the California lottery 3,000,000 consecutive times where the individual purchases no tickets at all.

The probability determination of one chance in 1024,000,000 presumes that each of the 16 steps is at least naturalistically *possible*, even if it is extremely *improbable*. But the last two steps present a problem for a naturalistic model. Consciousness, the mind, and the spirit are not reducible to physics and chemistry. In other words, the mindless, the spiritless, and that which lacks consciousness (undirected evolutionary processes) cannot create that which is mindful, spiritual, and conscious. Barrow, Carter, and Tipler merely considered the origin of the genes that govern some of the mind's and spirit's operations.

Their probability determination also fails to consider that no naturalistic explanation for the origin of physical life exists; naturalistic explanations aren't even possible. All naturalistic models for life's origin require a supply of building block molecules and time for those building block molecules to self assemble. Yet overwhelming evidence now demonstrates that neither the time nor the building blocks were present for the origin of life on Earth.3

Moreover, the 16 steps imply that no category of life has permanently disappeared in spite of the fact that mass extinctions have occurred throughout life's history. The steps are additions to life, not replacements. If life appeared on Earth without a plan, purpose, or goal, then why have all categories remained?

It makes better sense that the Creator would act to ensure that no category of life permanently disappears. A Creator could intend that all life fulfill a role in equipping humanity to carry out our purpose and destiny. Psalm 104:24 provides an apt two-sentence summary of the origin of life and the 16 steps: "How many are your works, O LORD! In wisdom you made them all; the earth is full of your creatures."

Subjects: Life Design

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